

WEST**End of Result Set**

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I.D.S.

L5: Entry 1 of 1

File: JPAB

Dec 10, 1986

PUB-NO: JP361279925A

DOCUMENT-IDENTIFIER: JP 61279925 A

TITLE: INTERACTIVE INPUT DEVICE

PUBN-DATE: December 10, 1986

INVENTOR-INFORMATION:

NAME

ARIYOSHI, SHUNJI

ASSIGNEE-INFORMATION:

NAME

TOSHIBA CORP

COUNTRY

N/A

APPL-NO: JP60120660

APPL-DATE: June 5, 1985

INT-CL (IPC): G06F 3/16; G10L 3/00; G10L 3/00

ABSTRACT:

PURPOSE: To attain the correct input of characters, etc. by using another input device for input of characters, words, clauses, sentences, etc. when they are rejected repetitively by a fixed number of times.

CONSTITUTION: The documents supplied by a user through a speech recognizing part 2 and a mike 1 are stored in a memory device 5. If a certain word pronounced by the user is rejected, the relevant signal is transmitted to a rejection counter 3 to count up this counter 3. When the output of the counter reaches a fixed level after the rejection is repeated, the output is sent to a conversation control part 4 and an indication is given to a voice synthesizing part 6 to inform through a speaker 7 that an input is given from another input device. At the same time, the input given from an on-line character recognizer 9 is activated. Thus the user can supply the rejected words or sentences through a tablet 8. Hereafter the input operation is continued again in voices.

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L7: Entry 1 of 5

File: JPAB

Apr 17, 1992

PUB-NO: JP404117611A

DOCUMENT-IDENTIFIER: JP 04117611 A

TITLE: MAGNETIC RECORDING MEDIUM

PUBN-DATE: April 17, 1992

INVENTOR-INFORMATION:

NAME

HATA, HISATOSHI

FUJINO, NAOHIKO

SATAKE, FUMIAKI

ASSIGNEE-INFORMATION:

NAME

MITSUBISHI ELECTRIC CORP

COUNTRY

N/A

APPL-NO: JP02238716

APPL-DATE: September 5, 1990

INT-CL (IPC): G11B 5/66; G11B 5/85

ABSTRACT:

PURPOSE: To decrease medium noises by forming Cr thin films as layers of ≥ 3 layers and lowering the power per layer of film formation at the time of formation.

CONSTITUTION: This recording medium consists of an Al-Mg substrate 1, a cured underlying layer of Ni-P, Cr thin films 3a to 3c, a Co alloy thin film 4, and a protective film 5. The Cr thin films 3a to 3c are formed as the layers of ≥ 3 layers. Then, the power per layer of the film formation at the time of formation is lowered. The mobility of sputtered atoms is decreased in this way and the crystallinity of the Co alloy thin film 4 to be epitaxially grown on the Cr thin films 3a to 3c is improved, by which the medium noises are decreased.

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L9: Entry 1 of 4

File: JPAB

Nov 11, 1992

PUB-NO: JP404321919A

DOCUMENT-IDENTIFIER: JP 04321919 A

TITLE: INTRA-SURFACE MAGNETIC RECORDING MEDIUM

PUBN-DATE: November 11, 1992

INVENTOR-INFORMATION:

NAME

FUTAMOTO, MASAAKI

MATSUDA, YOSHIFUMI

INABA, NOBUYUKI

ASSIGNEE-INFORMATION:

NAME

HITACHI LTD

COUNTRY

N/A

APPL-NO: JP03090303

APPL-DATE: April 22, 1991

US-CL-CURRENT: 428/900

INT-CL (IPC): G11B 5/66

ABSTRACT:

PURPOSE: To improve a recording density and S/N by forming a 1st substrate layer having a b.c.c. structure, a 2nd substrate layer having an h.c.p. structure and a magnetic film having an h.c.p. structure on a nonmagnetic substrate.

CONSTITUTION: The 1st substrate layer 102, the 2nd substrate layer 103, a magnetic film 104 and a protective film 105 are formed in this order on the nonmagnetic substrate 101. The layer 102 has the b.c.c. (body centered cubic) structure, the layer 103 has the h.c.p. (hexagonal closed packed) structure. Co or Co alloy which is liable to have the h.c.p. structure is used for the film 104. More preferably the preferential growth bearing of the film forming the layer 102 is 110 and the preferential growth bearing forming the film 103 is 101 or 110.

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L10: Entry 1 of 1

File: JPAB

Aug 5, 1994

PUB-NO: JP406215346A

DOCUMENT-IDENTIFIER: JP 06215346 A

TITLE: MAGNETIC RECORDING MEDIUM

PUBN-DATE: August 5, 1994

INVENTOR-INFORMATION:

NAME

MARY, FRANCIS DOANER

KWANG, KON KIM

THOMAS, R SCHATZ

ANDREW, CHIU-YAN TING

CHIH-KUNG, C WANG

POUEN, WANG

ASSIGNEE-INFORMATION:

NAME

INTERNATL BUSINESS MACH CORP

COUNTRY

N/A

APPL-NO: JP05296223

APPL-DATE: November 26, 1993

INT-CL (IPC): G11B 5/66

ABSTRACT:

PURPOSE: To obtain a magnetic recording medium having improved coercive force and decreased low-frequency modulation by forming the lower layers of plural layers of two-layered surfaces and forming a first thin film of chromium and a second thin film of a chrome-vanadium alloy.

CONSTITUTION: This magnetic recording medium has a substrate 10 having the substrate surface thin film 14 of an NiP alloy deposited by a non-electrolytic treatment and a disk base body 12 of an AlMg alloy, a plurality of layers of the lower layers 20 (consisting of the thin films 22, 24) formed on this substrate 10 and a protective coating 40 formed on a magnetic layer 30 of a Co alloy. A layer 50 of a liquid lubricant is added thereto. The first thin film 22 of a plurality of layers of the lower layers 20 is Cr and the second thin film 24 is Cr80V20. These thin films are formed by deposition by sputtering. As a result, the magnetic recording disk of the thin film Co alloy having the greatly improved coercive force and the decreased low-frequency modulation

improved coercive force and the decreased low-frequency modulation
is obtd.

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L11: Entry 1 of 2

File: JPAB

Sep 16, 1994

PUB-NO: JP406259741A

DOCUMENT-IDENTIFIER: JP 06259741 A

TITLE: MAGNETIC RECORDING MEDIUM

PUBN-DATE: September 16, 1994

INVENTOR-INFORMATION:

NAME

OKUDERA, MASA HARU

YAMADA, MINORU

ASSIGNEE-INFORMATION:

NAME

ALPS ELECTRIC CO LTD

COUNTRY

N/A

APPL-NO: JP05066252

APPL-DATE: March 2, 1993

INT-CL (IPC): G11B 5/66

ABSTRACT:

PURPOSE: To obtain a magnetic recording medium having uniform magnetic characteristics by laminating a thin film inhibiting the induction of magnetic anisotropy and a magnetic film having isotropic magnetic properties on the surface of a substrate.

CONSTITUTION: An Ni-P alloy film 2 is formed on an Al alloy substrate 1 by electroless plating and the surface of the substrate 1 is polished. A thin film 7 of Ti is then formed while heating the substrate 1 and an underlayer 3 of Cr and a magnetic film 4 of a CoCrTa or CoNiCa alloy are formed by bias sputtering. A protective layer 5 is further formed by sputtering. The magnetic recording medium having uniform magnetic characteristics is obtd. independently of marks of the polishing on the surface of the Ni-P alloy film 2 as a magnetic recording medium having high coercive force and capable of increasing recording density.

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L12: Entry 1 of 2

File: JPAB

Sep 22, 1994

PUB-NO: JP406267050A

DOCUMENT-IDENTIFIER: JP 06267050 A

TITLE: METAL FILM TYPE MAGNETIC RECORDING MEDIUM

PUBN-DATE: September 22, 1994

INVENTOR-INFORMATION:

NAME

OKUMURA, YOSHINOBU

YOU, KOUHA

ENDO, ISAO

ASSIGNEE-INFORMATION:

NAME

KUBOTA CORP

COUNTRY

N/A

APPL-NO: JP05054155

APPL-DATE: March 15, 1993

INT-CL (IPC): G11B 5/66

ABSTRACT:

PURPOSE: To obtain a metal film type magnetic recording medium having both of an excellent flatness and a high coercive force.

CONSTITUTION: A magnetic recording medium prepared by laminating a CR ground layer 5, a magnetic recording layer 6 and a protective layer 7 on a nonmagnetic medium base 4 in this sequence. The medium base 4 is prepared by laminating an NiPX layer 3 on a nonmetallic substrate 1 such as a glass substrate or a carbon substrate and by forming them into a film. One or more kinds of elements belonging to 4A, 5A and 6A of a periodic table are selected as X and the content thereof is made 20at.% or below in total. On the occasion, it is advisable that a nonmagnetic layer 2 for heat storage being excellent in thermal conductivity is laminated between the nonmetallic substrate 1 and the NiPX layer 3 so that they are formed into a film.

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L13: Entry 1 of 5

File: JPAB

Jan 24, 1995

PUB-NO: JP407021543A

DOCUMENT-IDENTIFIER: JP 07021543 A

TITLE: MAGNETIC RECORDING MEDIUM

PUBN-DATE: January 24, 1995

INVENTOR-INFORMATION:

NAME

YAMADA, MISUZU

KOGURE, TOSHIHIRO

ASSIGNEE-INFORMATION:

NAME

NIPPON SHEET GLASS CO LTD

COUNTRY

N/A

APPL-NO: JP05163499

APPL-DATE: July 1, 1993

INT-CL (IPC): G11B 5/66

ABSTRACT:

PURPOSE: To obtain a magnetic recording medium having a magnetic film contg. noble metal and consisting essentially of Co by making the difference in crystal lattice constant between a nonmagnetic base film and an alloy magnetic film larger than that between a second magnetic base film and the alloy magnetic film.

CONSTITUTION: A glass substrate 1 is heated, and a Ti film 2 and aluminum 3 are continuously vapor-deposited. A TiSi film 4 is further formed thereon, the substrate is heated, and a Cr film 5 (nonmagnetic base film), a Cr90Mo10 film 6 (second nonmagnetic base film), a Co81Cr13Pt6 alloy magnetic film 7 and a carbon protective film 8 are successively formed. The crystal lattice constant of the base film 6 is continuously increased from the base film 5 side toward the magnetic film 7 side and approximated to the crystal lattice constant of the magnetic film 7. The base film 5 is formed in the initial stage with a metallic film of single composition or the like having good crystallinity, and a second metallic component in the film is increased toward the magnetic film 7 and epitaxially grown.

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L15: Entry 1 of 3

File: JPAB

Apr 7, 1995

PUB-NO: JP407093738A

DOCUMENT-IDENTIFIER: JP 07093738 A

TITLE: MAGNETIC RECORDING MEDIUM

PUBN-DATE: April 7, 1995

INVENTOR-INFORMATION:

NAME

MIYAMOTO, YUKIHIRO

OOKIJIMA, MAKOTO

ASSIGNEE-INFORMATION:

NAME

MITSUBISHI CHEM CORP

COUNTRY

N/A

APPL-NO: JP05236214

APPL-DATE: September 22, 1993

INT-CL (IPC): G11B 5/66

ABSTRACT:

PURPOSE: To reduce noise in the high density recording region of a magnetic recording medium using an NiP plated Al alloy substrate textured in the circumferential direction.

CONSTITUTION: A discontinuous underlayer of Cu, Al, Ge or Ag is formed on an NiP plated Al alloy substrate textured in the almost circumferential direction and an intermediate layer of a Cr alloy and a magnetic layer of a Co alloy are successively formed on the underlayer while impressing bias voltage. By this structure, magnetic anisotropy in the circumferential direction is eliminated, magnetic isotropy is ensured for the magnetic layer, the reduction of coercive force is suppressed and the sudden increase of noise in the case of writing at high frequency is prevented. By the bias film formation, high coercive force is attained. The textured shape is retained even after the film formation and durability is maintained.

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L16: Entry 1 of 4

File: JPAB

Nov 21, 1995

PUB-NO: JP407307020A
DOCUMENT-IDENTIFIER: JP 07307020 A
TITLE: MAGNETIC RECORDING MEDIUM

PUBN-DATE: November 21, 1995

INVENTOR-INFORMATION:

NAME

FUTAMOTO, MASAOKI
HIRAYAMA, YOSHIYUKI
TAKAYAMA, TAKANOBU
INABA, NOBUYUKI
YAMAMOTO, TOMOO
NAKAMURA, ATSUSHI
HONDA, YUKIO
HOSOE, YUZURU

ASSIGNEE-INFORMATION:

NAME

HITACHI LTD

COUNTRY

N/A

APPL-NO: JP06096779

APPL-DATE: May 10, 1994

INT-CL (IPC): G11B 5/66

ABSTRACT:

PURPOSE: To obtain an intrasurface magnetic recording medium improved that it is made to fit for high density magnetic recording.

CONSTITUTION: A 1st underlayer 102 having a (100) oriented Nail type crystal structure is formed on a nonmagnetic base substrate 101, microscopic ruggedness 103 is imparted to the surface of the underlayer 102 and a 2nd underlayer 104 having a bcc structure is formed on the underlayer 102. A magnetic film 105 of a Co-based alloy having an hcp structure is then formed on the underlayer 104. Recording-resolving power is improved by imparting magnetic anisotropy to the magnetic film and sliding resistance can also be improved.

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L17: Entry 1 of 6

File: JPAB

Jan 12, 1996

PUB-NO: JP408007251A

DOCUMENT-IDENTIFIER: JP 08007251 A

TITLE: MAGNETIC RECORDING MEDIUM

PUBN-DATE: January 12, 1996

INVENTOR-INFORMATION:

NAME

KAMISHIRO, NAOTO

ASSIGNEE-INFORMATION:

NAME

FUJI ELECTRIC CO LTD

COUNTRY

N/A

APPL-NO: JP06132330

APPL-DATE: June 15, 1994

INT-CL (IPC): G11B 5/66; G11B 5/704

ABSTRACT:

PURPOSE: To provide a magnetic recording medium in which the strength of is secured and the use of a thinner substrate is made possible and which has high coercive force by minimizing the warpage deformation through reducing the difference of film thickness between Ni-P plated films on the both surfaces of the substrate and improving the flatness of the substrate.

CONSTITUTION: In this medium, a substrate for magnetic recording obtained by forming the Ni-P plated films 1a as the undercoat layers on the both surfaces of the non-magnetic substrate 1 is used. At this time, the thickness of the substrate for magnetic recording is $\leq 0.635\text{mm}$ and the difference of film thickness between the Ni-P plated films 1a on the both surfaces of the substrate 1 is adjusted to $\leq 0.35\mu\text{m}$. By using this substrate for magnetic recording provided with the Ni-P plated films 1a, the difference of film thickness between which is $\leq 0.35\mu\text{m}$, the flatness of the substrate for magnetic recording obtained after high temp. treatment is improved to realize $\leq 5\mu\text{m}$ flatness. Thus, the use of a thinner substrate and the sputtered film formation at a higher temp. is made possible through maintaining this substrate in such a state that its warpage deformation hardly occurs.

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L18: Entry 1 of 3

File: JPAB

May 17, 1996

PUB-NO: JP408124153A

DOCUMENT-IDENTIFIER: JP 08124153 A

TITLE: GLASS SUBSTRATE FOR MAGNETIC RECORDING MEDIUM, ITS
PRODUCTION AND MAGNETIC RECORDING MEDIUM

PUBN-DATE: May 17, 1996

INVENTOR-INFORMATION:

NAME

MATSUNO, KENSUKE

MATSUNO, YOSHIHIRO

KOMURA, HIROSHI

ASSIGNEE-INFORMATION:

NAME

NIPPON SHEET GLASS CO LTD

COUNTRY

N/A

APPL-NO: JP06258125

APPL-DATE: October 24, 1994

INT-CL (IPC): G11B 5/84; C03C 21/00; G11B 5/66

ABSTRACT:

PURPOSE: To greatly improve the smoothness of a surface and to eliminate the problem of elution of ions substd. in an ion exchange treatment by consisting a glass substrate of a glass substrate which is subjected to the ion exchange treatment on its surface, then to a polishing treatment.

CONSTITUTION: A second ground surface film 2 consisting of Ti, etc., is formed on the surface of the glass substrate 1 and thereafter, this film is subjected to texturing by deposition of metallic particulates of aluminum 3, etc., following which a second ground surface film 4 consisting of Cr, etc., a magnetic film 5 consisting of a Co alloy, etc., and a protective film 6 consisting of carbon, etc., are successively formed by sputtering; further, a lubricant is applied thereon to form a lubricating oil film 7. The glass substrate 1 is roughened by the ion exchange treatment in such a case but the glass substrate after the ion exchange treatment is subjected to the polishing treatment, by which the glass substrate having the extremely high smoothness is obtd.

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L19: Entry 1 of 3

File: JPAB

Aug 20, 1996

PUB-NO: JP408212531A

DOCUMENT-IDENTIFIER: JP 08212531 A

TITLE: MAGNETIC RECORDING MEDIUM AND PRODUCTION THEREOF

PUBN-DATE: August 20, 1996

INVENTOR-INFORMATION:

NAME

KATAOKA, HIROYUKI

KANBE, TETSUYA

KASHIWASE, HIDEKAZU

FUJITA, SHIOJI

FURUSAWA, KENJI

ASSIGNEE-INFORMATION:

NAME

HITACHI LTD

COUNTRY

N/A

APPL-NO: JP07020697

APPL-DATE: February 8, 1995

INT-CL (IPC): G11B 5/66; G11B 5/84; G11B 5/85; H01F 41/20

ABSTRACT:

PURPOSE: To obtain a multilayered film type structure of a magnetic recording medium suppressing the generation of recording noise at the time of high density recording and a method to produce the magnetic recording medium.

CONSTITUTION: A 1st underlayer 5 of Cr, Ti, Zr, Al, Si, V, Nb, Mo or an alloy based on such metals, a 2nd underlayer 4 of Ta or Hf, a 3rd underlayer 3 of Cr, V or an alloy of them, a magnetic layer 2 of a Co alloy and a protective lubricative layer 1 are successively laminated on a nonmagnetic substrate 6. The average coercive force of the resultant magnetic recording medium is increased by 10-20% as compared with the conventional magnetic recording medium having a similar structure and the standardized noise factor is reduced by 10-18%.

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L20: Entry 1 of 2

File: JPAB

Oct 18, 1996

PUB-NO: JP408273160A

DOCUMENT-IDENTIFIER: JP 08273160 A

TITLE: PRODUCTION OF MAGNETIC RECORDING MEDIUM

PUBN-DATE: October 18, 1996

INVENTOR-INFORMATION:

NAME

SATO, TAKASHI

SATO, KIYOSHI

MOROISHI, KEIJI

KAWASUMI, ISAO

KAWAI, HISAO

ASSIGNEE-INFORMATION:

NAME

HOYA CORP

COUNTRY

N/A

APPL-NO: JP07075493

APPL-DATE: March 31, 1995

INT-CL (IPC): G11B 5/85; C23C 14/14; C23C 14/34; G11B 5/82; H01F 10/28; H01F 41/18

ABSTRACT:

PURPOSE: To obtain a magnetic recording medium having high coercive force and high reproduction output by forming a magnetic film having a prescribed compsn. by sputtering under a prescribed pressure of inert gas when a magnetic layer is formed.

CONSTITUTION: A 1st underlayer 2, a 2nd underlayer 3, a 3rd underlayer 4, a magnetic layer 5, a protective layer 6 and a lubricative layer 7 are successively formed on a glass substrate 1 to obtain a magnetic disk. When the magnetic layer 5 is formed, a magnetic film 5 having a compsn. represented by the formula $\text{Co}_{100-a-b}\text{Ni}_a\text{Cr}_b$ [where (a) is 20-30at.% and (b) is 8-12at.%] is formed by sputtering under 0.5-7mTorr pressure of inert gas. The objective magnetic recording medium having high coercive force and high reproduction output and generating low noise at the time of reproduction is obtd.

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L21: Entry 1 of 2

File: JPAB

Dec 13, 1996

PUB-NO: JP408329442A

DOCUMENT-IDENTIFIER: JP 08329442 A

TITLE: MAGNETIC RECORDING MEDIUM

PUBN-DATE: December 13, 1996

INVENTOR-INFORMATION:

NAME

ATAKA, TOYOMICHI

OKUBO, KEIJI

KANAMORI, MASASHI

ASSIGNEE-INFORMATION:

NAME

FUJI ELECTRIC CO LTD

COUNTRY

N/A

APPL-NO: JP07131367

APPL-DATE: May 30, 1995

INT-CL (IPC): G11B 5/66

ABSTRACT:

PURPOSE: To obtain a magnetic recording medium having high line recording density and generating low noise by making magnetic anisotropy close to magnetic isotropy by correction while maintaining high coercive force.

CONSTITUTION: The nonmagnetic metallic underlayer 3 of a magnetic disk has a two-layered structure and consists of a 1st underlayer 3a made of a pure Cr film and a 2nd underlayer 3b of a Cr alloy contg. 4at.% Ta. In the medium with the nonmagnetic metallic underlayer 3 consisting of the 1st underlayer 3a producing magnetic anisotropy with higher coercive force in the circumferential direction than that in the radial direction and the 2nd underlayer 3b producing magnetic anisotropy with lower coercive force in the circumferential direction than that. in the radial direction, magnetic anisotropy is relaxed and becomes close to magnetic isotropy, accordingly low noise is attained. Since the value of coercive force is higher than that of the underlayers 3a, 3b, high line recording density is attained.

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L23: Entry 1 of 4

File: JPAB

Jun 6, 1997

PUB-NO: JP409147348A

DOCUMENT-IDENTIFIER: JP 09147348 A

TITLE: MAGNETIC RECORDING MEDIUM AND ITS PRODUCTION

PUBN-DATE: June 6, 1997

INVENTOR-INFORMATION:

NAME

KOBAYASHI, MASATO

MOROISHI, KEIJI

HORIKAWA, JUNICHI

NOZAWA, JUN

ASSIGNEE-INFORMATION:

NAME

HOYA CORP

COUNTRY

N/A

APPL-NO: JP07309606

APPL-DATE: November 28, 1995

INT-CL (IPC): G11B 5/66; C23C 14/14; C23C 14/34; C23C 14/56; H01F 10/16; H01F 41/18

ABSTRACT:

PROBLEM TO BE SOLVED: To reduce medium noise and to increase coercive force and squareness ratio by specifying value given by subtracting the interplanar spacing of a prescribed face of a nonmagnetic underlayer from that of a prescribed face of a magnetic layer.

SOLUTION: An underlayer 2 on the mirror-polished surface of a glass substrate 1 consists of a thin Al film 2a, a thin Cr film 2b and a thin CrV film 2c from the substrate 1 side. A magnetic layer 3 is made of a CoPtCr alloy. Value [d(002)-d(110)] given by subtracting the interplanar spacing of the bcc (110) face of the CrV film 2c from that of the hcp (002) face of the magnetic layer 3 is 0.002-0.032 \AA .

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L24: Entry 1 of 2

File: JPAB

Oct 7, 1997

PUB-NO: JP409265619A

DOCUMENT-IDENTIFIER: JP 09265619 A

TITLE: MAGNETIC RECORDING MEDIUM, ITS PRODUCTION AND MAGNETIC STORAGE DEVICE

PUBN-DATE: October 7, 1997

INVENTOR-INFORMATION:

NAME

INAGAKI, YUZURU

MATSUDA, YOSHIFUMI

YAKU, SHINAN

ISHIKAWA, AKIRA

ASSIGNEE-INFORMATION:

NAME

HITACHI LTD

COUNTRY

N/A

APPL-NO: JP08070338

APPL-DATE: March 26, 1996

INT-CL (IPC): G11B 5/66; G11B 5/85

ABSTRACT:

PROBLEM TO BE SOLVED: To provide a magnetic recording medium with which recording and reproducing of high-density information is possible and which has high coercive force, low noise, high S' and high reliability.

SOLUTION: This magnetic recording medium is constituted by arranging information recording layers 15, 15' consisting of magnetic films of a Co-based alloy system via at least two layers of nonmagnetic ground surface layers 13, 14, 13', 14' on a substrate 11. The first nonmagnetic ground surface films 13, 13' arranged on the extreme substrate side among the nonmagnetic ground surface layers 13, 14, 13', 14' consist of composite films essentially consisting of Cr and contg. at least one kind of the elements in the group consisting of Zr, Si, Al, Ti, V, Ta and Y and oxygen. The concn. of the elements described above is specified to ≥ 1 to ≤ 20 atm.% and the concn. of the oxygen to ≥ 1 to ≤ 30 atm.%.

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L29: Entry 74 of 166

File: JPAB

Mar 23, 1992

PUB-NO: JP404089620A

DOCUMENT-IDENTIFIER: JP 04089620 A

TITLE: PRODUCTION OF MAGNETIC RECORDING MEDIUM

PUBN-DATE: March 23, 1992

INVENTOR-INFORMATION:

NAME

HATA, HISATOSHI

FUJINO, NAOHIKO

SATAKE, FUMIAKI

ASSIGNEE-INFORMATION:

NAME

MITSUBISHI ELECTRIC CORP

COUNTRY

N/A

APPL-NO: JP02200712

APPL-DATE: July 25, 1990

US-CL-CURRENT: 428/694TP

INT-CL (IPC): G11B 5/84

ABSTRACT:

PURPOSE: To decrease medium noises and to improve S/N by providing a 1st Cr thin-film layer on a base material consisting of a nonmagnetic material, providing a Co alloy thin-film layer on this 1st Cr thin-film layer and further, providing a 2nd Cr thin-film layer on this Co alloy thin-film layer and subjecting the layers to a heat treatment at $\geq 150^{\circ}\text{C}$.

CONSTITUTION: The base material 10 consisting of the nonmagnetic material is constituted of an Al-Mg substrate 1 and an Ni-P underlying cured layer 2. The 1st Cr thin-film layer 3, the Co alloy thin-film layer 4, the 2nd Cr thin-film layer 5, and the protective film layer 6 are laminated in this order thereon; thereafter, the layers are heat treated at $\geq 150^{\circ}\text{C}$. Namely, these layers are so formed that the Cr thin-film layer diffuses to the Co alloy thin-film layer and, therefore, the isolatability of the particles of the Co alloy thin-film layer is enhanced by the Cr of the nonmagnetic material. The Cr of the nonmagnetic material is diffused by the Co alloy thin-film layer and is segregated at the grain boundaries of the Co alloy and, therefore, the medium noises are decreased and the S/N is improved.

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L31: Entry 1 of 5

File: JPAB

Feb 17, 1992

PUB-NO: JP404047520A

DOCUMENT-IDENTIFIER: JP 04047520 A

TITLE: MAGNETIC RECORDING MEDIUM

PUBN-DATE: February 17, 1992

INVENTOR-INFORMATION:

NAME

YOKOYA, SHOICHIRO

ASSIGNEE-INFORMATION:

NAME

NEC CORP

COUNTRY

N/A

APPL-NO: JP02157204

APPL-DATE: June 15, 1990

US-CL-CURRENT: 428/695

INT-CL (IPC): G11B 5/66

ABSTRACT:

PURPOSE: To improve the high-density recording in horizontal recording by providing a thin film of a ferromagnetic cobalt alloy having the parallel axis of easy magnetization parallel on the crystal face of a nonmagnetic metallic layer having the prescribed crystal face parallel with an information recording surface.

CONSTITUTION: After a nickel phosphorus layer 2 is deposited on an aluminum substrate 1, a lower layer 3 consisting of a chromium alloy, a magnetic layer 4 consisting of the cobalt alloy, a protective film 5, and a lubricating film 6 are successively formed by a sputtering technique thereon. Second elements (V, Mo, Ti, Ta, etc.) are added to the chromium layer at this time. The (100) face of the chromium is then oriented by the precipitation of the 2nd element and the lower layer 3 of the chromium alloy is formed. The (200) face of the atoms of the lower layer 3 of the chromium is paralleled with the recording surface of the substrate 1 in such a manner, by which the cobalt alloy atoms are stuck to the chromium structure along the (110) face. The axis of easy magnetization of the cobalt alloy is paralleled with the disk surface and the magnetic characteristics optimum for high-density recording are applied to the magnetic recording layer.

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L22: Entry 1 of 11

File: JPAB

Jan 10, 1997

PUB-NO: JP409007150A

DOCUMENT-IDENTIFIER: JP 09007150 A

TITLE: MAGNETIC RECORDING MEDIUM AND MAGNETIC STORAGE DEVICE

PUBN-DATE: January 10, 1997

INVENTOR-INFORMATION:

NAME

YAMAMOTO, TOMOO

INABA, NOBUYUKI

IGARASHI, KAZUSUKATSU

ISHIKAWA, AKIRA

FUTAMOTO, MASAACKI

HOSOE, YUZURU

YAMANAKA, ICHISUKE

TAMAI, ICHIRO

MANGYO, EMI

ASSIGNEE-INFORMATION:

NAME

HITACHI LTD

COUNTRY

N/A

APPL-NO: JP07150533

APPL-DATE: June 16, 1995

INT-CL (IPC): G11B 5/66

ABSTRACT:

PURPOSE: To enhance coercive force and to reduce noise in high density recording.

CONSTITUTION: This magnetic recording medium 10 has a laminated structure obtd. by successively forming control films 12, 12' of Cr, under films 13, 13' of CrTi, magnetic films 14, 14' of a CoCrPtTa alloy and protective films 15, 15' of carbon on both sides of an Ni-P plated Al alloy substrate 11. The compsn. of the under films 13, 13' is represented by the formula (100-x)at.% Cr-(x)at.% Ti (5≤x≤35). The compsn. of the magnetic films 14, 14' is represented by the formula (100-x-y-z)at.% Co-(x)at.% Cr-(y)at.% Pt-(z)at.% Ta (x+y+z≤35, 14≤x≤23, 6≤y≤20 and 1≤z≤8).

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L14: Entry 1 of 2

File: JPAB

Oct 20, 1995

PUB-NO: JP407272263A

DOCUMENT-IDENTIFIER: JP 07272263 A

TITLE: MAGNETIC DISK

PUBN-DATE: October 20, 1995

INVENTOR-INFORMATION:

NAME

UWAZUMI, HIROYUKI

UCHINO, SATOSHI

SHIMADA, FUSAJI

KURATA, NOBORU

KANENIWA, YUJI

HIRANO, HIROSHI

ASSIGNEE-INFORMATION:

NAME

FUJI ELECTRIC CO LTD

COUNTRY

N/A

APPL-NO: JP07014891

APPL-DATE: February 1, 1995

INT-CL (IPC): G11B 5/82

ABSTRACT:

PURPOSE: To obtain a magnetic disk using a nonmagnetic substrate of a material such as glass, excellent in shock resistance, CSS durability and magnetic characteristics and capable of reduction in diameter and thickness.

CONSTITUTION: An NiP layer 12 is formed by electroless plating on a discoid nonmagnetic substrate 11 of a material such as glass and the surface of the substrate 11 is finely grooved along the circumferential direction by mechanical texturing to obtain a non-magnetic base 1 with a roughened surface. A Cr underlayer 2, a Co alloy-based magnetic layer 3 and a carbon protective film 4 are successively formed on the base 1 by sputtering and a liq. lubricant layer 5 is further formed on the film 4 to obtain the objective magnetic disk.

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	Type	L #	Hits	Search Text	DBs
1	IS&R	L1	3172	((("428/65.3") or ("428/141") or ("428/694T") or ("428/694TS") or ("428/694ST") or ("428/694SG") or ("428/694TR") or ("428/216")).CCLS.	USPAT
2	BRS	L14	973	1 and (roughness "Ra")	USPAT
3	BRS	L15	147	14 and ("NiP" (nickel adj phosphrous))	USPAT
4	BRS	L16	136	15 and (tape disk medium media)	USPAT
5	BRS	L17	12	16 and (stripe ridges stripe-like worm-like)	USPAT
6	BRS	L19	109	16 and magnetic	USPAT
7	BRS	L20	2	19 and ((radial near4 "Ra") (radial near4 "roughness"))	USPAT

	Type	L #	Hits	Search Text	DBs
1	IS&R	L1	3172	(("428/65.3") or ("428/141") or ("428/694T") or ("428/694TS") or ("428/694ST") or ("428/694SG") or ("428/694TR") or ("428/216")).CCLS.	USPAT
2	BRS	L2	512	1 and ("Co" near4 "Cr")	USPAT
3	BRS	L3	138	2 and ("Pt" near4 "Cr")	USPAT
4	BRS	L4	85	3 and ("Ta" near4 "Cr")	USPAT
5	BRS	L5	22	4 and ("Nb" near4 "Cr")	USPAT
6	BRS	L8	19798	"Co" near4 "Cr"	JPO; Derwent
7	BRS	L9	534	8 and ("Pt" near4 "Cr")	JPO; Derwent
8	BRS	L10	77	9 and ("Ta" near4 "Cr")	JPO; Derwent
9	BRS	L11	18	10 and ("Nb" near4 "Cr")	JPO; Derwent